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How**TRANSMITTAL
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(to be used for all correspondence after initial filing)

TRANSMITTAL FORM (to be used for all correspondence after initial filing)	Application Number	09/524,076	
	Filing Date	March 13, 2000	
	First Named Inventor	Peter Chaikowsky	
	Art Unit	3724	
	Examiner Name	B. Ashley	
Total Number of Pages in This Submission	9	Attorney Docket Number	

ENCLOSURES (check all that apply)

<input checked="" type="checkbox"/> Fee Transmittal Form <input type="checkbox"/> Fee Attached <input type="checkbox"/> Amendment / Reply <input type="checkbox"/> After Final <input type="checkbox"/> Affidavits/declaration(s) <input type="checkbox"/> Extension of Time Request <input type="checkbox"/> Express Abandonment Request <input type="checkbox"/> Information Disclosure Statement <input type="checkbox"/> Certified Copy of Priority Document(s) <input type="checkbox"/> Reply to Missing Parts/ Incomplete Application <input type="checkbox"/> Reply to Missing Parts under 37 CFR1.52 or 1.53	<input type="checkbox"/> Drawing(s) <input type="checkbox"/> Licensing-related Papers <input type="checkbox"/> Petition <input type="checkbox"/> Petition to Convert to a Provisional Application <input type="checkbox"/> Power of Attorney, Revocation Change of Correspondence Address <input type="checkbox"/> Terminal Disclaimer <input type="checkbox"/> Request for Refund <input type="checkbox"/> CD, Number of CD(s) ____ <input type="checkbox"/> Landscape Table on CD	<input type="checkbox"/> After Allowance Communication to TC <input checked="" type="checkbox"/> Appeal Communication to Board of Appeals and Interferences <input type="checkbox"/> Appeal Communication to TC (Appeal Notice, Brief, Reply Brief) <input type="checkbox"/> Proprietary Information <input type="checkbox"/> Status Letter <input checked="" type="checkbox"/> Other Enclosure(s) (please identify below): Return Post Card
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Firm	Black & Decker Inc.		
Signature			
Printed Name	Adan Ayala, Esq.		
Date	February 7, 2005	Reg. No.	38,373

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Effective 10/01/2004. Patent fees are subject to annual revision.

☐ Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT (\$) 500

Complete if Known

Application Number	09/524,076
Filing Date	March 13, 2000
First Named Inventor	Peter Chaikowsky
Examiner Name	B. Ashley
Art Unit	3724
Attorney Docket No.	TN-1698

METHOD OF PAYMENT (check all that apply)

☐ Check ☐ Credit card ☐ Money ☐ Other ☐ None
Order

☒ Deposit Account:

Deposit
Account
Number

02-2548

Deposit
Account
Name

Black & Decker (U.S.) Inc.

The Director is authorized to: (check all that apply)

☒ Charge fee(s) indicated below ☒ Credit any overpayments
☐ Charge any additional fee(s) or any underpayment of fee(s)
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FEE CALCULATION

1. BASIC FILING FEE

Large Entity		Small Entity		Fee Description	Fee Paid
Fee Code	Fee (\$)	Fee Code	Fee (\$)		
1001	790	2001	395	Utility filing fee	
1002	350	2002	175	Design filing fee	
1003	550	2003	275	Plant filing fee	
1004	790	2004	395	Reissue filing fee	
1005	160	2005	80	Provisional filing fee	

SUBTOTAL (1)

(\$) 0

2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE

Total Claims		Extra Claims		Fee from below		Fee Paid	
Independent Claims		-20 **		= 0		X 0 = 0	
Multiple Dependent		-3 **		= 0		X 0 = 0	

Large Entity		Small Entity		Fee Description
Fee Code	Fee (\$)	Fee Code	Fee (\$)	
1202	18	2202	9	Claims in excess of 20
1201	88	2201	44	Independent claims in excess of 3
1203	300	2203	150	Multiple dependent claim, if not paid
1204	88	2204	44	** Reissue independent claims over original patent
1205	18	2205	9	** Reissue claims in excess of 20 and over original patent

SUBTOTAL (2)

(\$) 0

**or number previously paid, if greater; For Reissues, see above

FEE CALCULATION (continued)

3. ADDITIONAL FEES

Large Entity		Small Entity		Fee Description	Fee Paid
Fee Code	Fee (\$)	Fee Code	Fee (\$)		
1051	130	2051	65	Surcharge - late filing fee or oath	
1052	50	2052	25	Surcharge - late provisional filing fee or cover sheet.	
1053	130	1053	130	Non-English specification	
1812	2,520	1812	2,520	For filing a request for <i>ex parte</i> reexamination	
1804	920*	1804	920*	Requesting publication of SIR prior to Examiner action	
1805	1,840*	1805	1,840*	Requesting publication of SIR after Examiner action	
1251	110	2251	55	Extension for reply within first month	
1252	430	2252	215	Extension for reply within second month	
1253	980	2253	490	Extension for reply within third month	
1254	1,530	2254	765	Extension for reply within fourth month	
1255	2,080	2255	1,040	Extension for reply within fifth month	
1401	340	2401	170	Notice of Appeal	
1402	340	2402	170	Filing a brief in support of an appeal	500
1403	300	2403	150	Request for oral hearing	
1451	1,510	1451	1,510	Petition to institute a public use proceeding	
1452	110	2452	55	Petition to revive - unavoidable	
1453	1,370	2453	685	Petition to revive - unintentional	
1501	1,370	2501	685	Utility issue fee (or reissue)	
1502	490	2502	245	Design issue fee	
1503	660	2503	330	Plant issue fee	
1460	130	1460	130	Petitions to the Commissioner	
1807	50	1807	50	Processing fee under 37 CFR 1.17 (q)	
1806	180	1806	180	Submission of Information Disclosure Stmt	
8021	40	8021	40	Recording each patent assignment per property (times number of properties)	
1809	790	2809	395	Filing a submission after final rejection (37 CFR § 1.129(a))	
1810	790	2810	395	For each additional invention to be examined (37 CFR § 1.129(b))	
1801	790	2801	395	Request for Continued Examination (RCE)	
1802	900	1802	900	Request for expedited examination of a design application	

Other fee (specify) _____

*Reduced by Basic Filing Fee Paid

SUBTOTAL (3)

(\$) 500

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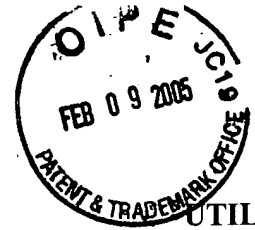
Complete (if applicable)

Name (Print/Type)	Adan Ayala, Esq.	Registration No. (Attorney/Agent)	38,373	Telephone	410-716-2368
Signature		Date	February 7, 2005		

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UTILITY PATENT

B&D No. TN1698

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

BOARD OF PATENT APPEALS AND INTERFERENCES

In re application of: **Peter CHAIKOWSKY**

Serial No.: **09/524,076**

Examiner: **B. Ashley**

Filed: **March 13, 2000**

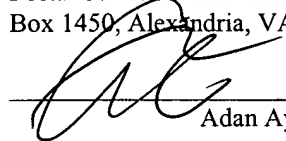
Group Art Unit: **3724**

For: **MITER SAW**

Assistant Commissioner for Patents
Washington, DC 20231

REPLY BRIEF

I, Adan Ayala, Reg. No. 38,373, certify that this correspondence is being deposited with the U.S. Postal Service as first class mail in an envelope addressed to the Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on February 7, 2005



Adan Ayala

Dear Sir:

I. INTRODUCTION

An Examiner's Answer was mailed on December 14, 2004. The present reply brief is

being timely filed as required under 37 CFR § 41.41.

02/10/2005 HDEMESS1 00000034 022548 09524076

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II. ARGUMENT**A. Claims 1-11 are Patentable under 35 USC § 103(a) Over DE '408.**

The Board should reverse the Examiner's improper final rejection of Claims 1-11 under 35 USC § 103(a) based on DE '408. In particular, the Examiner erred by disregarding evidence of criticality and nonobviousness. Therefore, the Examiner's rejection was improper and should be reversed.

In the Examiner's Answer, the Examiner raised several arguments. However, they all basically boil down to the following argument: no criticality exists in the claimed ranges because the achieved results were expected under DE '408.

According to the Examiner, DE '408 teaches modifying a miter saw to cut a desired workpiece by "allowing the blade to be plunged below the table plane more than conventional miter saws as well as locating the fence." In other words, the variables taught by DE '408 for modification are (1) blade area below the table plane and (2) the location of the fence.

In particular, DE '408 discloses a ten-inch miter saw that can cut a 4" by 4" workpiece, and a 6.5" by ¾" workpiece. Translation of DE '408, p. 6, lines 32-39 (attached as Appendix B in the Appeal Brief; future citations for DE '408 refer to the translation). These constitute the maximum cutting capacity for a ten-inch DE '408 miter saw. The DE '408 can cut a larger (but thinner) workpiece beyond such maximum cutting capacity by moving the fence rearwardly and adding a support, thus lifting the table (and affecting the blade area below the table plane). DE '408, p. 7, lines 10-18 and p. 8, lines 12-18. DE '408 does not teach or suggest modifying any other variables.

Claim 4 however calls for the modification and optimization of other variables that DE '408 does not disclose for modification, such as the distance between the first (chopping) axis and the blade center. By the optimization of some of the DE '408 variables as well as the other variables mentioned above, the claimed miter saw can achieve cuts achievable by the DE '408 miter saw without having to change the position of the fence or the blade area below the table plane, as well as cuts not achievable by the DE '408 miter saw, such the ability to cut a dimensional 4" by 6" workpiece. Such ability has been discussed in paragraph 12 of the Chaikowsky Declaration. Such result is unexpected.

The Examiner believes that such results were to be expected under DE '408. It appears that the Examiner misunderstands the law of criticality and unexpected results.

According to the Federal Circuit, evidence of unexpected results (and thus of nonobviousness) includes evidence of superiority of a property shared with the prior art. *In re Chupp*, 816 F.2d 643, 2 USPQ2d 1437, 1439 (Fed. Cir. 1987). The *Chupp* case is especially relevant to the present case as in that case, the Patent Office argued that, while the claimed invention had a superior performance over the single prior art reference, such superior performance was not an unexpected difference in properties. The Federal Circuit rejected such argument and held that the superior results of the claimed invention over the single reference was evidence of criticality.

Similarly, the Examiner is arguing that the claimed invention's superior results over DE '408 are not unexpected. Effectively, the Examiner argues that DE '408 shows how to modify the miter saw to obtain different cuts, and that the claimed invention should be compared to both the disclosed and implied teachings of DE '408. Such standard contradicts the *Chupp* test. *Chupp*

disregards the implied teachings of the single prior art reference and compares the properties of the claimed invention with the properties of the prior art as disclosed, without any implied teachings. Accordingly, the Board should compare the claimed invention with the DE '408 miter saw as disclosed, not as modified by implied teachings, as suggested the Examiner.

Based on the disclosure of DE '408, such miter saw would be able to cut long and thin workpieces, e.g., 8.66" by 3/4" if the table plane is raised and the fence is moved rearwardly, or thicker workpieces of shorter length, e.g., a 4" by 4" workpiece, and a 6.5" by 3/4" workpiece.¹ These are the maximum cutting lengths disclosed by DE '408 for a ten-inch blade. A similar miter saw incorporating the claimed invention would be able to cut a 4" by 4" workpiece, a 6.5" by 3/4" workpiece, **and** a dimensional 4" by 6" workpiece, which is not cuttable by the DE '408 miter saw.² Applicants/Appellant submit that the claimed invention's ability to cut the same

¹ The Examiner mistakenly argues in page 15 that the FIG. 5 embodiment of DE '408 would allow cutting all three of the 8.66" by 3/4", 4" by 4", and 6.5" by 3/4" workpieces. This is incorrect. Persons of ordinary skill in the art recognize that miter saws can cut long and skinny pieces, e.g., 8.66" by 3/4", or short and thick pieces, e.g., 4" by 4", but not both long and thick pieces, e.g., 8.66" by 4". This is because, in order to cut a long distance, the blade has to be plunged deeply, increasing the blade area under the table plane (as shown in FIG. 5). However, such deep plunge limits the distance between the table plane and the blade arbor (13 in DE '408), which in effect limits the cuttable thickness. While the claimed miter saw does not achieve the extreme example discussed, i.e., 8.66" by 4", it certainly has improved cutting capacity over the prior art DE '408 miter saw.

² The Examiner argues in page 17 that the specific workpiece sizes cuttable by the claimed invention "are irrelevant as there are not limitations in the claims for any specific dimensioned workpieces." Admittedly, the claims do not call for specific workpiece sizes. Applicants/Appellant are not basing the patentability of Claim 4 on language that specifically calls out these cuttable workpiece sizes. Instead, Applicants/Appellant believe that patentability resides in the optimum claimed ranges which allow cuts not achieved by the DE '408 miter saw. The specific cuttable workpiece sizes are appropriate means to compare the cutting capacities of the claimed invention and the DE '408 miter saw, both having the same ten-inch blade. As such, the specific cuttable workpiece sizes are highly relevant as evidence of superiority over the DE '408 prior art.

workpieces as the DE '408 miter saw, as well as larger workpieces that are not cuttable by the DE '408 miter saw, is a superior property over DE '408. This has not been disputed by the Examiner. Accordingly, such result would constitute evidence of unexpected results and nonobviousness under *Chupp*.

Furthermore, evidence of a property not possessed by the prior art is evidence of nonobviousness. *In re Papesch* 315 F.2d 381, 137 USPQ 43, 48 (CCPA 1963).

Applicants/Appellant submit that the claimed invention's ability to cut larger workpieces that are not cuttable by the DE '408 miter saw is a property not possessed by DE '408. Again, this has not been disputed by the Examiner. Accordingly, such result would constitute evidence of unexpected results and nonobviousness under *Papesch*.

In view of the evidence of criticality and the present state of the law, Applicant/Appellant urges the Board to reverse the Examiner's improper rejection of the claims under DE '408 and to allow such claims.

B. Claims 1-2 and 4-6 are Patentable under 35 USC § 103(a) Over Shiotani in view of DE '408.

The Board should reverse the Examiner's improper final rejection of Claims 1-2 and 4-6 under 35 USC § 103(a) based on DE '408. In particular, the Examiner erred by disregarding evidence of criticality and nonobviousness. Therefore, the Examiner's rejection was improper and should be reversed.

As admitted by the Examiner, Shiotani does not disclose the claimed distances between the first axis and the table plane and between the first axis and the fence plane. To make up for such deficiency, the Examiner relies on DE '408, which shows the distance between the first axis

and the table plane is 0.57 times the radius and the distance between the first axis and the fence plane is 0.927 times the radius.³

The Examiner argues that it would be obvious to modify DE '408 to obtain such specific dimensions. As discussed in Section II.A above, there is no teaching or suggestion to modify DE '408 as proposed by the Examiner. Furthermore, Applicant/Appellant has presented evidence of criticality and thus of nonobviousness, which the Examiner has disregarded without any proper basis and not countered with any facts or evidence.

Accordingly, a miter saw based on Shiotani and DE '408 would not have all the claimed elements. Therefore, Claim 4 is patentable over Shiotani/DE '408. Accordingly, Applicant/Appellant urges the Board to reverse the Examiner's improper rejection of the claims under Shiotani/DE '408 and to allow such claims.

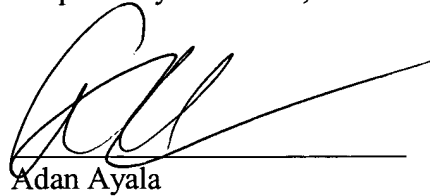
³ The Examiner has questioned how Applicants/Appellant "determined these specific dimensions, as Figure 3 appears to lack sufficient data to make any mathematical calculations of any dimensions because the only known dimensions are the blade diameter and the workpiece sizes." Applicants/Appellant basically measured Figure 3 to determine whether the drawings were drawn to scale and found that the lengths were substantially consistent. Based on such finding, Applicants/Appellant extrapolated the other dimensions. The Examiner incorrectly dismisses these measurements based on MPEP § 2125.

Under such section, "[w]hen the reference does not disclose that the drawings are to scale and is silent as to dimensions, arguments based on measurement of the drawing features are of little value." MPEP § 2125, at 2100-66 (8th ed., rev. 2, May 2004). In the present case, while DE '408 does not disclose that the drawings are to scale, it is not silent as to dimensions. Accordingly, the measured dimensions can be used under such section. Indeed, "the description of the article pictured can be relied on, in combination with the drawings." *Id.* (citing *In re Wright*, 569 F.2d 1124, 193 USPQ 332 (CCPA 1977)).

III. CONCLUSION

Based on the foregoing, Applicant/appellant urges the Board to rule that Claims 1-11 are patentable over DE '408 and Shiotani/DE '408.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'Adan Ayala', is written over a horizontal line.

Adan Ayala

PTO Reg. No. 38,373

Attorney for Applicants/Appellant